## **EAST Search History**

## **EAST Search History (Prior Art)**

| Ref# | Hits                  | Search Query  | DBs  | Default<br>Operator                       | Plurals | Time Stamp          |
|------|-----------------------|---|--|---|---------|---------------------|
| L1   | 7449                  | ultrasonic transmitters   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR                                      | ON      | 2010/05/04<br>15:16 |
| L2   | 1233752               | receivers   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR                                      | ON      | 2010/05/04<br>15:16 |
| L3   | 2938530               | USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB   |  | 2010/05/04<br>15:16                       |         |                     |
| L4   | 2136                  | L1 and L2 and L3  | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | PUB; NEAR ON<br>T; USOCR;<br>IPO;<br>ENT; |         | 2010/05/04<br>15:16 |
| L5   | 14                    | "4247922"   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR                                      | ON      | 2010/05/04<br>15:16 |
| L6   | 3                     | ("4247922").PN.   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR  | OFF     | 2010/05/04<br>15:16 |
| L7   | 108 L4 and factory LE |   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR                                      | ON      | 2010/05/04<br>15:16 |
| L8   | 11                    | (("4,247,922") or<br>("5,491,670") or<br>("6,292,106") or<br>("6,433,689") or<br>("6,553,013")).PN. | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR  | OFF     | 2010/05/04<br>15:16 |
| L9   | 6                     | L7 and coarse and fine  | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR                                      | ON      | 2010/05/04<br>15:16 |

| L10 | 7449    | ultrasonic transmitters   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR           | ON  | 2010/05/04<br>15:16 |
|-----|---------|---|--|----------------|-----|---------------------|
| L11 | 1233752 | receivers   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR ON<br>CR; |     | 2010/05/04<br>15:16 |
| L12 | 2938530 | path  | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR           | ON  | 2010/05/04<br>15:16 |
| L13 | 2136    | L10 and L11 and L12   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR           | ON  | 2010/05/04<br>15:16 |
| L14 | 14      | "4247922"   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR           | ON  | 2010/05/04<br>15:16 |
| L15 | 3       | ("4247922").PN.   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR             | OFF | 2010/05/04<br>15:16 |
| L16 | 108     | L13 and factory   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR           | ON  | 2010/05/04<br>15:16 |
| L17 | 11      | (("4,247,922") or<br>("5,491,670") or<br>("6,292,106") or<br>("6,433,689") or<br>("6,553,013")).PN. | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR             | OFF | 2010/05/04<br>15:16 |
| L18 | 6       | L16 and coarse and fine   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR           | ON  | 2010/05/04<br>15:16 |
| L19 | 0       | L15 and coarse and fine   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR           | ON  | 2010/05/04<br>15:16 |

| L20 | 0      | L15 and coarse near7<br>distance and fine near7<br>distance           | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2010/05/04<br>15:16 |
|-----|--------|---|--|------|-----|---------------------|
| L21 | 726    | coarse near7 distance<br>and fine near7 distance                      | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2010/05/04<br>15:16 |
| L22 | 0      | L16 and L21   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2010/05/04<br>15:16 |
| L23 | 2      | L13 and L21   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2010/05/04<br>15:16 |
| L24 | 16     | ("3076519"  <br>"3098992"  <br>"4055830").PN. OR<br>("4247922").URPN. | US-PGPUB;<br>USPAT; USOCR                                      | NEAR | ON  | 2010/05/04<br>15:16 |
| L25 | 402497 | ultrasonic  | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2010/05/04<br>15:16 |
| L26 | 194    | L25 and L10 and factory   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2010/05/04<br>15:16 |
| L27 | 0      | L26 and L21   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2010/05/04<br>15:16 |
| L28 | 117    | L26 and L12   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2010/05/04<br>15:16 |
| L29 | 30513  | ("367").CLAS.   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | OFF | 2010/05/04<br>15:16 |

| L30 | 2     | L28 and L29                                       | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB         | NEAR | ON  | 2010/05/04<br>15:16 |
|-----|-------|---|--|------|-----|---------------------|
| L31 | 190   | L13 and L29                                       | L13 and L29 US-PGPUB; NEAR ON USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB |      | ON  | 2010/05/04<br>15:16 |
| L32 | 2     | L31 and factory                                   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB         | NEAR | ON  | 2010/05/04<br>15:16 |
| L33 | 2     | L21 and L31                                       | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB         | NEAR | ON  | 2010/05/04<br>15:16 |
| L34 | 29    | L31 and triangula\$4                              | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB         | NEAR | ON  | 2010/05/04<br>15:16 |
| L35 | 37111 | ultrasonic and<br>electromagnetic                 | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB         | NEAR | ON  | 2010/05/04<br>15:16 |
| L36 | 4192  | L35 and determine<br>near3 position               | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB         | NEAR | ON  | 2010/05/04<br>15:16 |
| L37 | 118   | L35 and determine<br>near3 position near7<br>path | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB         | NEAR | ON  | 2010/05/04<br>15:16 |
| L38 | 30513 | ("367").CLAS.                                     | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB         | OR   | OFF | 2010/05/04<br>15:16 |
| L39 | 2     | L37 and L38                                       | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB         | NEAR | ON  | 2010/05/04<br>15:16 |

| L40        | 81      | L36 and L38   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2010/05/04<br>15:16 |
|------------|---------|---|--|------|-----|---------------------|
| L41        | 4       | (("5748106") or US-F<br>("6348908")).PN. USPA<br>EPO<br>DER<br>IBM_                                 |  | OR   | OFF | 2010/05/04<br>15:20 |
| S1         | 7112    | ultrasonic transmitters   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2009/07/22<br>11:15 |
| S2         | 1162530 | receivers   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2009/07/22<br>11:15 |
| S3         | 2789288 | path  | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2009/07/22<br>11:15 |
| S4         | 2011    | S1 and S2 and S3  | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2009/07/22<br>11:16 |
| S5         | 14      | "4247922"   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2009/07/22<br>11:16 |
| <b>S</b> 6 | 3       | ("4247922").PN.   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | OFF | 2009/07/22<br>11:16 |
| S7         | 96      | S4 and factory  | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2009/07/22<br>11:21 |
| <b>S</b> 8 | 11      | (("4,247,922") or<br>("5,491,670") or<br>("6,292,106") or<br>("6,433,689") or<br>("6,553,013")).PN. | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | OFF | 2009/07/22<br>11:29 |

| S9  | 5       | S7 and coarse and fine  | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2009/07/22<br>14:11 |
|-----|---------|---|--|------|-----|---------------------|
| S10 | 7112    | ultrasonic transmitters   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2009/07/22<br>14:38 |
| S11 | 1162530 | receivers   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2009/07/22<br>14:38 |
| S12 | 2789288 | path  | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2009/07/22<br>14:38 |
| S13 | 2011    | S10 and S11 and S12   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2009/07/22<br>14:38 |
| S14 | 14      | "4247922"   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2009/07/22<br>14:38 |
| S15 | 3       | ("4247922").PN.   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | OFF | 2009/07/22<br>14:38 |
| S16 | 96      | S13 and factory   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2009/07/22<br>14:38 |
| S17 | 11      | (("4,247,922") or<br>("5,491,670") or<br>("6,292,106") or<br>("6,433,689") or<br>("6,553,013")).PN. | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | OFF | 2009/07/22<br>14:38 |
| S18 | 5       | S16 and coarse and fine   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2009/07/22<br>14:38 |

| S19 | 0      | S15 and coarse and fine   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON | 2009/07/22<br>14:40 |
|-----|--------|---|--|------|----|---------------------|
| S20 | 0      | S15 and coarse near7<br>distance and fine near7<br>distance           | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON | 2009/07/22<br>14:40 |
| S21 | 687    | coarse near7 distance<br>and fine near7 distance                      | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON | 2009/07/22<br>14:40 |
| S22 | 0      | S16 and S21   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON | 2009/07/22<br>14:40 |
| S23 | 2      | S13 and S21   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON | 2009/07/22<br>14:40 |
| S24 | 16     | ("3076519"  <br>"3098992"  <br>"4055830").PN. OR<br>("4247922").URPN. | US-PGPUB;<br>USPAT; USOCR                                      | NEAR | ON | 2009/07/22<br>14:51 |
| S25 | 377331 | ultrasonic  | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON | 2009/07/22<br>14:54 |
| S26 | 175    | S25 and S10 and factory   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON | 2009/07/22<br>14:54 |
| S27 | 0      | S26 and S21   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON | 2009/07/22<br>14:54 |
| S28 | 105    | S26 and S12   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON | 2009/07/22<br>14:54 |

| S29 | 29861 | ("367").CLAS.                                     | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | OFF | 2009/07/22<br>14:54 |
|-----|-------|---|--|------|-----|---------------------|
| S30 | 2     | S28 and S29                                       | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2009/07/22<br>14:55 |
| S31 | 185   | S13 and S29                                       | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2009/07/22<br>14:56 |
| S32 | 2     | S31 and factory                                   | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2009/07/22<br>14:56 |
| S33 | 2     | S21 and S31                                       | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2009/07/22<br>14:57 |
| S34 | 26    | S31 and triangula\$4                              | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2009/07/22<br>15:48 |
| S35 | 35758 | ultrasonic and<br>electromagnetic                 | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2010/01/14<br>12:56 |
| S36 | 4013  | S35 and determine<br>near3 position               | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2010/01/14<br>12:56 |
| S37 | 115   | S35 and determine<br>near3 position near7<br>path | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON  | 2010/01/14<br>12:56 |
| S38 | 30223 | ("367").CLAS.                                     | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | OFF | 2010/01/14<br>12:57 |

| S39 | 2  | S37 and S38 | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON | 2010/01/14<br>12:57 |
|-----|----|-------------|--|------|----|---------------------|
| S40 | 76 | S36 and S38 | US-PGPUB;<br>USPAT; USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | NEAR | ON | 2010/01/14<br>12:57 |

## **EAST Search History (Interference)**

| Ref# | Hits | Search Query  | DBs            | Default<br>Operator | Plurals | Time Stamp       |
|------|------|---|----------------|---------------------|---------|------------------|
| L42  | O    | locating arrangement same pluality same ultrasonic transmitters same path and electromagnetic reciever and one identification unit same ultrasonic receiver same electromagnetic transmitter same evaluation and distance same between adjacent ultrasonic transmitter same greater than one meter and evaluation unit same operable same determine same coarse resolution same reception signal same at elast one electromagnetic radiation receiver same reception same been sent same electromagnetic same transmitter same least one identification unit.clm. | USPAT;<br>UPAD | NEAR                | ON      | 2010/05/04 16:30 |
| 43   | 0    | locating arrangement same pluality same ultrasonic transmitters same path and electromagnetic reciever and one identification unit same ultrasonic receiver same electromagnetic transmitter same evaluation and distance same between adjacent ultrasonic transmitter same greater than one meter and evaluation unit same operable same   | USPAT;<br>UPAD | NEAR                | ON      | 2010/05/04 16:30 |

|     |   | determine same coarse resolution same reception signal same at elast one electromagnetic radiation receiver same reception same been sent same electromagnetic same transmitter same least one identification.clm.   |                |      | and the second s |                  |
|-----|---|--|----------------|------|--|------------------|
| L44 | 0 | locating arrangement same pluality same ultrasonic transmitters same path and electromagnetic reciever and one identification unit same ultrasonic receiver same electromagnetic transmitter same evaluation and distance same between adjacent ultrasonic transmitter same greater than one meter and evaluation unit same operable same determine same coarse resolution same reception signal same at elast one electromagnetic radiation receiver same reception same been sent same electromagnetic same transmitter same least one. clm. | USPAT;<br>UPAD | NEAR | ON   | 2010/05/04 16:30 |
| L45 |   | locating arrangement same pluality same ultrasonic transmitters same path and electromagnetic reciever and one identification unit same ultrasonic receiver same electromagnetic transmitter same evaluation and distance same between adjacent ultrasonic transmitter same greater than one meter and evaluation unit same operable same determine same coarse resolution same reception signal same at elast one electromagnetic radiation receiver same reception same been sent same electromagnetic same transmitter same least.          | USPAT;<br>UPAD | NEAR | ON   | 2010/05/04 16:30 |

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